

LISTING OF CLAIMS

1. *(original)*: A method for detecting the presence of clear cell renal cell carcinoma (CC-RCC) in a subject, or the susceptibility of the subject for developing CC-RCC comprising detecting or measuring LSAMP and/or NORE1 gene expression in a sample from the subject, and comparing the expression with a baseline level of expression, wherein a reduction in the expression of one or both of said genes compared to the baseline level indicates that the subject suffers from, or is susceptible to CC-RCC.
- 2 *(original)*: The method of claim 1 wherein the expression is detected or measured as transcription of mRNA encoded by the LSAMP and/or NORE1 gene, by detecting or measuring the presence or amount of said mRNA in said sample.
- 3 *(original)*: The method of claim 1 wherein the expression is detected or measured as a polypeptide product encoded by the LSAMP or NORE1 gene, by detecting or measuring the presence or amount of LSAMP or NORE1 polypeptide in said sample.
- 4 *(original)*: The method of claim 3 wherein said detecting or measuring is performed with a binding partner for said LSAMP1 or NORE1 polypeptide.
- 5 *(original)*: The method of claim 4 wherein said binding partner is an antibody specific for an epitope of said LSAMP1 or NORE1 polypeptide and said detecting or measuring is by an immunoassay.
- 6 *(original)*: The method of claim 1 ~~any of claims 1-5~~ wherein said sample is a cell, tissue or tissue extract.
- 7 *(original)*: The method of claim 1 ~~any of claims 1-5~~ wherein said sample is a body fluid selected from the group consisting of blood, plasma, serum, urine, saliva or cerebrospinal fluid.
- 8 *(original)*: The method of claim 7 wherein said sample is a kidney tumor.
9. *(original)*: The method of claim 8 wherein said sample is section of a paraffin embedded tissue section of said kidney tumor.

10 (*original*): A method for inhibiting a cancer-associated property of a cell in which the expression of the *LSAMP* and/or *NORE1* genes is reduced compared to a baseline value, comprising providing to the cell an effective amount of *LSAMP* and/or *NORE1* polypeptide or active fragment or variant thereof, wherein said polypeptide fragment or variant augments the level of *LSAMP* and/or *NORE1* gene products in the cell, thereby inhibiting said cancer-associated property.

11 (*original*): The method of claim 10 wherein the providing is by microinjection, liposome-mediated introduction, or electroporation.

12 (*original*): A method for inhibiting a cancer-associated property of a cell in which the expression of the *LSAMP* and/or *NORE1* genes is reduced compared to a baseline value, comprising providing to the cell an effective amount of

- (a) an *LSAMP* and/or *NORE1* polypeptide or active fragment or active variant thereof;
 - (b) an expressible polynucleotide encoding said *LSAMP* and/or *NORE1* polypeptide, fragment or variant; or
 - (c) an agent that induces or increases expression of the *LSAMP* and/or *NORE1* genes;
- wherein said polypeptide, fragment or variant, said polynucleotide or said agent results in an increased level of *LSAMP* and/or *NORE1* gene products in the cell, thereby inhibiting said cancer-associated property.

13 (*original*): The method of claim 12 wherein said property is tumor growth.

14 (*original*): The method of claim 12 wherein the providing is by microinjection, liposome-mediated transfer, electroporation or microinjection.

15 (*original*): A method for treating a subject with CC-RCC in whom CC-RCC cells under-express the *LSAMP* and/or the *NORE1* gene compared to a baseline value, which method comprises administering to the subject an effective amount of

- (a) an *LSAMP* and/or *NORE1* polypeptide or active fragment or active variant thereof;
- (b) an expressible polynucleotide encoding said *LSAMP* and/or *NORE1* polypeptide, fragment or variant; or
- (c) an agent that induces or increases expression of the *LSAMP* and/or *NORE1* genes;

wherein said polypeptide, fragment or variant, said polynucleotide or said agent results in an increased level of *LSAMP* and/or *NORE1* gene product in the under-expressing CC-RCC cells, thereby treating said subject.

16 (original): The method of claim 15, wherein the polypeptide, active fragment, active variant, or agent is administered systemically or intratumorally.

17 (original): The method of claim 15 wherein the polynucleotide being administered comprises a sequence encode the polypeptide, fragment or variant operably linked to an expression control sequence which promotes or induces expression of the polypeptide in said subject.

18. (currently amended): The method of claim 15 ~~or 17~~ wherein the polynucleotide is administered by injection, by gene gun administration, or by needle-free jet injection.

19. (original): The method of claim 18 wherein the polynucleotide is administered intramuscularly or intratumorally.

20 (original): A pharmaceutical composition comprising

- (a) as an active moiety, an *LSAMP* and/or *NORE1* polypeptide, or an active fragment or variant thereof, or a polynucleotide encoding an *LSAMP* and/or *NORE1* polypeptide, or encoding an active fragment or variant of the polypeptide, wherein the polynucleotide is operably linked to an expression control sequence; and
- (b) a pharmaceutically acceptable carrier.

21 (original): The pharmaceutical composition of claim 20 wherein the active moiety is said polynucleotide.

22. (currently amended): A kit suitable for [[a]] carrying out the method of claim 3 by detecting the presence and/or measuring amount of an *LSAMP* and/or a *NORE1* polypeptide in a sample, the kit comprising one or more reagents for detecting and/or measuring said *LSAMP* and/or *NORE1* [[the]] polypeptide, ~~and optionally~~

23 (original): The kit of claim 22 wherein said detecting reagent is an antibody specific for an epitope of the *LSAMP* or *NORE1* polypeptide.

24 (original): The kit of claim 23 further comprising one or more reagents for testing the binding of the antibody to a sample polypeptide and/or for facilitating detection of antibody binding.

25. *(currently amended)*: A kit useful in ~~[[a]]~~ carrying out the method of claim 2 by detecting the presence and/or amount of a polynucleotide encoding LSAMP and/or NORE1 polypeptide in a sample, said kit comprising a nucleic acid probe specific for a LSAMP- or NORE1- encoding DNA or RNA, and, optionally, one or more reagents that facilitate hybridization of the probe to the sample DNA or RNA, and/or that facilitate detection of the hybridized probe.

26. *(currently amended)* A kit useful in ~~[[a]]~~ carrying out the method of claim 15, for ~~treating a subject with CC-RCC~~, comprising:

- (a) an LSAMP and/or NORE1 polypeptide or active fragment or active variant thereof;
- (b) an expressible polynucleotide encoding said LSAMP and/or NORE1 polypeptide, fragment or variant; or
- (c) an agent that induces or increases expression of the *LSAMP* and/or *NORE1* genes; and optionally, (i) a means for administering the polypeptide to the subject and (ii) instructions for using the kit.

27. *(currently amended)*: The kit of claim 22 ~~any of claims 21-26~~ comprising any one or more of: instructions for performing the method for which the kit is intended and/or for analyzing and/or evaluating the results of the method, a support on which a cell can be propagated, a support to which a reagent used in the method is immobilized, suitable buffers, media components, or other reagents for performing suitable controls, a computer, a computer-readable medium for storing and/or evaluating the assay results, containers or packaging materials.

28. *(original)*: An antibody specific for an epitope of the LSAMP or a NORE1 polypeptide which is useful in a the method of claim 5.

29. *(new)* The method of claim 17 wherein the polynucleotide is administered by injection, by gene gun administration, or by needle-free jet injection.

30. *(new)* The kit of claim 24 comprising any one or more of: instructions for performing the method for which the kit is intended and/or for analyzing and/or evaluating the results of the method, a support on which a cell can be propagated, a support to which a reagent used in the method is immobilized, suitable buffers, media components, or other reagents for performing suitable controls, a computer, a computer-readable medium for storing and/or evaluating the assay results, containers or packaging materials.

31. (new) The kit of claim 25 comprising any one or more of: instructions for performing the method for which the kit is intended and/or for analyzing and/or evaluating the results of the method, a support on which a cell can be propagated, a support to which a reagent used in the method is immobilized, suitable buffers, media components, or other reagents for performing suitable controls, a computer, a computer-readable medium for storing and/or evaluating the assay results, containers or packaging materials.